Carnegie Museum. This specimen was not sexed by the collector, and a later hand has pencilled "ad 3?" on the label. Both its plumage characters and its measurements, however, indicate that it is a female just completing what appears to be its first prebasic ("post-juvenal") moult. A specimen in AMNH from north-eastern Luzon (Barrio Dibutuan, San Mariano, Isabela Province) is unfortunately unidentifiable. It was originally sexed as a male, but is not fully adult and may have been mis-sexed, especially as its wing is *longer* than that of any male *ocellata* measured. It is in a plumage not otherwise represented in the AMNH series. If it is, indeed, a female, and if it has attained its full size, it is intermediate between *ocellata* and *benguetensis* in its measurements.

Measurements: T. o. benguetensis: ♀ wing (flat) 97, 97, 98; ♀ culmen (from forehead) 16, 17, 18. β wing 88, 88; β culmen 16, 16 · 5. T. o. ocellata: ♀ wing 105, 105, 108, 108, 108, 110, 111; ♀ culmen 20, 20, 20, 20, 20 · 5, 20 · 5, 21, 22. β wing 93, 93, 94, 95, 96, 102, β culmen 18 · 5, 18 · 5, 18 · 5, 19, 19 · 5. T. o. subsp.? (Isabela Prov.): wing 105, culmen 18 · 5 mm.

Specimens examined (all from Luzon): T. o. benguetensis: "North Luzon" (= Mt. Data, Mountain Province, 4; Baguio, Mountain Province, 1. T. o. ocellata: Bataan Province, 9; Bulacan Province, 2; Laguna Province, 1; "Manila" (including market birds), 3. T. o. subsp.: Isabela Province, 1.

ACKNOWLEDGMENTS

This study was based principally upon the specimens in the collection of the American Museum of Natural History, New York. I am grateful to Dr. Dean Amadon for extending to me the use of the facilities of that institution.

Notes on the Ocellated Rail (Micropygia schomburgkii) with first record from Central America

by ROBERT W. DICKERMAN

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On 9th March, 1967, the author, accompanied by Larry Wolf and Lloyd Kiff, was collecting the wedge-tailed Grass Finch (*Emberizoides herbicola*), at Buenos Aires, Puntarenas Province, Costa Rica, when a small rail was flushed and collected. The bird, which proved to be a female in basic plumage and with small gonads, was readily identified as an Ocellated Rail, *Micropygia schomburgkii* (Richard Schomburgk) by reference to *The Birds of Colombia* by R. Meyer de Schauensee, (1964). It is the first record of this monotypic genus for Central America.

The species is currently divided into two forms, the nominate subspecies, described from Venezuela and recorded from Colombia, French Guiana and Guyana; and M. s. chapmani, from the Matto Grosso of Brazil. In order to evaluate the geographic variation within the species and to identify subspecifically the Costa Rican specimen, I attempted to obtain on loan all available specimens. Twelve museums in the United States were contacted and a total of 30 specimens assembled, 27 from the American

Museum of Natural History! Three additional specimens, formerly in the American Museum of Natural History series, were not seen. Only two specimens of *chapmani* were seen, including the type. Measurements are in millimetres.

GEOGRAPHIC VARIATION

The wide ranging M. s. schomburgkii is a highly variable subspecies, ranging from lightly to heavily spotted on the back and varying from greyish-olive to ochraceous brown in basic coloration of the interscapular area. There is no discernable geographic variation in the coloration of the underparts throughout the species' range. The variation in the extent of the spotting on the head (Fig. 1) is in part accounted for by sexual dimorphism discussed below. Eleven males measure: wing chord 72-76 (74·2) culmen from nostril $7 \cdot 4 \cdot 8 \cdot 3$ (8·0); 13 females measure, wing chord 69-76 (73·5), culmen from nostril $7 \cdot 6 \cdot 8 \cdot 4$ (7·8).

The Costa Rican specimen is closest to M. s. schomburgkii but has more extensive black borders of the dorsal spots than any of 28 specimens of that form. In Fig. 1, the Costa Rican specimen is shown with a more heavily-than-average spotted specimen of schomburgkii in the centre and the type of chapmani on the right. Its measurements, wing chord 69, culmen from nostril 7·4, are at the small extreme for measurements of the nominate form. With but a single specimen from Central America one does not know if it represents an extreme within the normal variation of schomburgkii or a representative of a consistently darker population that remains to be described when further specimens are available. The Costa Rican specimen was deposited in the collection of the American Museum of Natural History.

One unsexed specimen from San Joaquin, Beni Province, Bolivia, the first record for that country, with culmen from nostril 8·3 and wing chord 73, is typical *schomburgkii* in amount of spotting and grey-brown coloration.

M. s. chapmani was described (Naumburg 1930) from a single male specimen, compared with three specimens of schomburgkii, as being larger throughout; with the bill longer and more slender, general coloration "umber brown" instead of "sepia brown", with dorsal spots more ovate and smaller, these having a narrower black border. Spotting was lacking on the rump and the upper tail-coverts. The tail was uniform without either darker or white markings, and the underparts were paler with ochraceous coloration more extended.

Hellmayr and Conover (1942), based on three Brazilian specimens, two from Bahia on the coast and one from Goyaz in the Matto Grosso, did not consider any size character, smaller spotting, or absence of spotting on lower back and rump to be consistent as racial characters as compared to three specimens of the nominate race. Unfortunately they did not discuss dorsal coloration. Assuming Conover and Hellmayr measured wing chord, their measurements of three specimens, 79-82, fall outside the measurements of 24 specimens of schomburgkii as does the type with wing chord 83. Likewise, the bill measured from nostril of the two specimens I have examined (9·0 and 8·7) is larger than in the nominate form.



Fig 1. Dorsal view of Ocellated Rail (Micropygia schomburgkii). Left: Costa Rica; Middle: A heavily marked specimen of M. s. schomburgkii from Venezuela and Right: Type of M. s. chapmani.

One recent specimen of *chapmani*, a male from Serra dos Parelis, Rio Jamare, Matto Grosso, collected "3/9/1940", wing chord 73, is very similar in coloration to the type, with spotting reduced in number and lacking on rump (tail is missing). In the sparseness of the dorsal spotting, this specimen and the type are matched only by one specimen of *schomburgkii*. Only two of 28 specimens of the nominate form lack or have obsolete rump spotting, and in general dorsal coloration, only five of the

series of *schomburgkii* are as richly ochraceous brown as are the two *chapmani*. Pinto (1964) described a female from Itatiba (east of San Paulo) (wing 80) which also lacks spots on upper tail-coverts and with those on rump reduced in size and numbers.

In summary, M. s. chapmani may be distinguished from the nominate form by generally more orange-brown coloration, reduced dorsal spotting (often these are absent on rump and upper tail-coverts) and probably larger size, especially wing chord. The Costa Rican specimen may represent an undescribed population with abundant spotting having broader black borders than those of nominate schomburgkii.



Fig 2. Dorsal and ventral views of specimens of *Micropygia schomburgkii* from Venezuela in post-juvenile moult.

JUVENAL PLUMAGE

In the series of 18 specimens collected January and February, 1938 from Mt. Auyan-tepui, Venezuela, in the American Museum of Natural History collection, there are three specimens that retain some juvenal plumage, which apparently has not been described previously. Ventrally (Fig. 2) the juvenile is more extensively white or cream coloured, with only a pale and diffuse ochraceous band across the breast and along the flanks. The sides and flanks are lightly barred with medium grey. Dorsally they are a uniform grey-brown (right-hand bird in Fig. 2), with adult-type spotting of the juvenal plumage restricted to wing-coverts, shoulders and upper sides, extending on to sides of neck. The top of the head may apparently be plain or spotted.

SEXUAL DIMORPHISM

There is a slight sexual dimporhism in head coloration. Males tend to have less spotting on head, with a more extensive rich ochraceous brown forehead and crown. Dividing the series into four classes based on crown:

1. head essentially uniformly rich brown, 2. cap extends to behind eyes,
3. spotting ends at eyes with only forehead without spotting, and 4. spotting covers entire forehead to bill base. The males divided into these groups
2, 7, 1, 0 respectively, while the females were 0, 2, 6, 4.

SOFT PART COLOURS

The colours of soft parts as noted on eight adults of the Mt. Auyantepui series collected during January and February do not show sexual dimorphism. Upper mandibles ranged from horn to brown to black, with light bluish-grey line running from nostril to base and with a bluish-grey or greenish-blue edge. Lower mandibles were recorded as greenish to horn at tip or light blue-grey. The feet were salmon or orange-red and iris colour was recorded as orange, reddish-brown or coral red.

ECOLOGY AND PHENOLOGY

It is interesting to note that in January and February, during the dry season in Venezuela, as in Costa Rica, the rail was collected in parched tropical savanna together with *Emberizoides herbicola* (Gilliard 1941). In Venezuela the savannas were bordered by marsh areas. In Costa Rica, specimens of both species were collected in tall grass along dry drainage channels, indicating considerably moister conditions during the rainy season (June to October-December). In March one of the *E. herbicola* from Costa Rica still retained a partially unossified skull indicating nesting probability at the height or after the height of the rainy season. This is in contrast to dry season nesting of two other South American species which also reach their limits in these same tropical savannas of southwestern Costa Rica. On the same date in March, an adult female Lesser Elaenia (*Elaenia chiriquensis*) was collected from a nest containing one young 2-3 days old, and a fully grown and fledged juvenile Pale-breasted Spinetail (*Synallaxis albescens*) was collected.

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References:

de Schauensee, R. M., 1964. The Birds of Colombia and adjacent areas of South and Central America. Narberth, Pennsylvania.

Gilliard, E. T., 1941. The birds of Mt. Auyan-tepui, Venezuela. Bull. Am. Mus. Nat. Hist. LXXVII 439-508.

cultura Sao Paulo.

Hellmayr, E. and Conover, B., 1942. Catalogue of Birds of the Americas. Zool. Series, Field Museum Nat. Hist. Naumburg, E. M. B., 1930. The birds of Matto Grosso, Brazil. Bull. Amer. Mus. Nat.

Hist. 60. Pinto, O. M. de O., 1964. Ornithologia Barsiliensis, Vol. 1. Dept. de Zool., Sec. de Agri-

Taxonomic notes on African birds

by C. M. N. WHITE

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The present completes notes on material in the Cape Town Museum and National Museum, Bulawayo in 1966.

Eurocephalus anguitimens Smith

Examination of large series does not convince me that the southern African nominate form can be subdivided by the recognition of E. a. niveus Clancey, 1965, Arnoldia, 1, no. 23, p. 2; Newington, Transvaal.

Phyllastrephus flavostriatus (Sharpe).

I am satisfied that P. f. dendrophilus Clancey, 1962, Durban Mus. Novit. 6, p. 152. Chimanimani Mt., Rhodesia is a valid form. It differs from the nominate form in having the crown dusky olive-grey, less sharply demarcated from the mantle, and the latter is more brownish-olive, less green. Its range is the highlands of eastern Rhodesia from Vumba to Inyanga.

Apalis thoracica (Shaw & Nodder).

Examination of much more material since my 1962 review makes it desirable to recognise additional forms and amend the details of some others in southern and central Africa. In the south-west Cape Province three forms are valid. The population west of the mountains from Cape Town to Lamberts Bay lacks green on the upperside and has pure grey flanks and should stand as A. t. griseopyga Lawson, 1965, Ostrich, p. 4: Kersenfontein, Berg River. East of the mountains from Paarl to Mossel Bay A. t. capensis Roberts, has a green wash on the lower back and slightly more olive-grey flanks. Still further east from Beaufort West and Knysna almost to Humansdorp the upperside exhibits a brownish-olive wash on